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20 March 2001
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Teresa G. Schultz
Teresa G. Schultz

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Graeme I. Bell et al.

Serial No.: 09/754,106

Filed: January 3, 2001

For: MUTATIONS IN THE DIABETES
SUSCEPTIBILITY GENES
HEPATOCTE NUCLEAR FACTOR
(HNF) 1 ALPHA (α), HNF-1 β AND HNF-
4 α

Group Art Unit: 1655

Examiner: J. Souaya

Atty. Dkt. No.: ARCD:272USC1/TJS

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record.

In accordance with 37 C.F.R. §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

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The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is hereby authorized to deduct said fees from Fulbright & Jaworski Deposit Account No. 50-1212/10100267/TJS.

This application is a continuation application of Serial No. 08/927,219, filed September 9, 1997 and is relied upon for an earlier filing date under 35 U.S.C. § 120. In accordance with Rule 37 C.F.R. § 1.98(d) copies of the listed documents are not enclosed as they have been previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/927,219.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



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Date: 20 March 2001

Form PTO-1449 (modified)

Atty. Docket No.

Serial No.

ARCD:272/WIM

08/927,219

List of Patents and Publications for Applicant's

Applicants

INFORMATION DISCLOSURE STATEMENTGraeme I. Bell, Kazuya Yamagata, Naohisha Oda,
Pamela J. Kaisaki, Hiroto Furuta, Yukio Horikawa and
Stephan Menzel

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Filing Date:

Group:

September 9, 1997

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U.S. Patent Documents

Foreign Patent Documents

Other Art

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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	A1	5,403,712	04-04-95	Crabtree <i>et al.</i>	435	6	11-22-93
	A2	5,541,060	07-30-96	Bell <i>et al.</i>	435	6	04-22-92

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No

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Exam. Init.	Ref. Des.	Citation
	C1	Bach <i>et al.</i> , "Cloning of human hepatic nuclear factor 1 (HNF1) and chromosomal localization of its gene in man and mouse," <i>Genomics</i> , 8:155-164, 1990.
	C2	Bach and Yaniv, "More potent transcriptional activators or a transdominant inhibitor of the HNF1 homeoprotein family are generated by alternative RNA processing," <i>EMBO J.</i> , 12(11):4229-4242, 1993.
	C3	Barrera-Hernandez <i>et al.</i> , "Effects of diabetes mellitus on hepatocyte nuclear factor 1 decrease albumin gene transcription," <i>J. Biol. Chem.</i> , 271(17):9969-9975, 1996.
	C4	Baumheuter <i>et al.</i> , "A variant nuclear protein in dedifferentiated hepatoma cells binds to the same functional sequences in the β fibrinogen gene promoter as HNF-1," <i>EMBO J.</i> , 7(8):2485-2493, 1988.
	C5	Baumheuter <i>et al.</i> , "HNF-1 shares three sequence motifs with the POU domain proteins and is identical to LF-B1 and APF," <i>Genes and Development</i> , 4:372-379 1990.

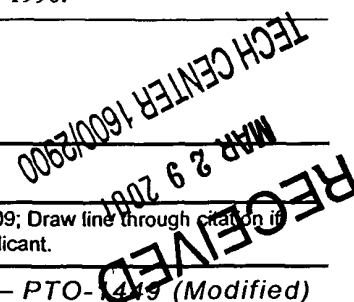
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Office of Patents and Publications for Applicant's

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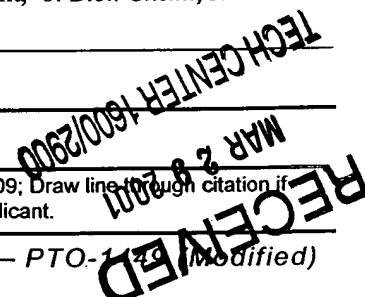
Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date if App.
	C6	Bell <i>et al.</i> , "Gene for non-insulin-dependent diabetes mellitus (maturity-onset diabetes of the young subtype) is linked to DNA polymorphism on human chromosome 20q," <i>Proc. Natl. Acad. Sci. USA</i> , 88:1484-1488, 1991.					
	C7	Blumenfeld <i>et al.</i> , "Hepatic nuclear factor 1 (HNF1) shows a wider distribution than products of its known target genes in developing mouse," <i>Development</i> , 113:58-599, 1991.					
	C8	Bourguet <i>et al.</i> , "Crystal structure of the ligand-binding domain of the human nuclear receptor RXR- α ," <i>Nature</i> , 375:377-382, 1995.					
	C9	Bowden <i>et al.</i> , "Identification of genetic markers flanking the locus for maturity-onset diabetes of the young on human chromosome 20," <i>Diabetes</i> , 41:88-92, 1992.					
	C10	Bowden <i>et al.</i> , "Linkage analysis of maturity-onset diabetes of the young (MODY): genetic heterogeneity and nonpenetrance," <i>Am. J. Hum. Genet.</i> 50:607-618, 1992.					
	C11	Bulman <i>et al.</i> , "A missense mutation in the hepatocyte nuclear factor 4 alpha gene in a UK pedigree with maturity-onset diabetes of the young," <i>Diabetologia</i> , 40:859-862, 1997.					
	C12	Byrne <i>et al.</i> , "Altered insulin secretory responses to glucose in subjects with a mutation in the <i>MODY1</i> gene on chromosome 20," <i>Diabetes</i> , 44(6):699-704, 1995b.					
	C13	Byrne <i>et al.</i> , "Insulin secretion and clearance during low-dose graded glucose infusion," <i>Am. J. Physiol.</i> , 268:E21-27, 1995a.					
	C14	Byrne <i>et al.</i> , "Insulin secretory abnormalities in subjects with hyperglycemia due to glucokinase mutations," <i>J. Clin. Invest.</i> , 93:1120-1130, 1994.					
	C15	Carter <i>et al.</i> , "A pleiotropic element in the medium-chain acyl coenzyme A dehydrogenase gene promoter mediates transcriptional regulation by multiple nuclear receptor transcription factors and defines novel receptor-DNA binding motifs," <i>Mol. Cell. Biol.</i> , 14(7):4360-4372, 1994.					
	C16	Carter <i>et al.</i> , "Hepatocyte nuclear factor-4 activates medium chain acyl-CoA dehydrogenase gene transcription by interacting with a complex regulatory element," <i>J. Biol. Chem.</i> , <i>J. Biol. Chem.</i> , 268(19):13805-13810, 1993.					

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Information Disclosure Statement — PTO-1449 (Modified)



Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

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Foreign Patent Documents

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	C17	Cereghini <i>et al.</i> , "Liver-enriched transcription factors and hepatocyte differentiation," <i>FASEB J.</i> , 10:267-282, 1996.					
	C18	Chartier <i>et al.</i> , "Cloning and sequencing of cDNAs encoding the human hepatocyte nuclear factor 4 indicate the presence of two isoforms in human liver," <i>Gene</i> , 147:269-272, 1994.					
	C19	Chen <i>et al.</i> , "Disruption of the HNF-4 gene, expressed in visceral endoderm, leads to cell death in embryonic ectoderm and impaired gastrulation of mouse embryos," <i>Genes and Dev.</i> , 8:2466-2477, 1994.					
	C20	Chouard <i>et al.</i> , "A distal dimerization domain is essential for DNA-binding by the atypical HNF1 homeodomain," <i>Nucl. Acids Res.</i> , 18(19):5853-5863, 1990.					
	C21	Citron <i>et al.</i> , "Identity of 4a-carbinolamine dehydratase, a component of the phenylalanine hydroxylation system, and DC0H, a transregulator of homeodomain proteins," <i>Proc. Natl. Acad. Sci. USA</i> , 89:11891-11894, 1992.					
	C22	Courtois <i>et al.</i> , "Interaction of a liver-specific nuclear factor with the fibrinogen and α_1 -antitrypsin promoters," <i>Science</i> 238:688-692, 1987.					
	C23	Courtois <i>et al.</i> , "Purified hepatocyte nuclear factor 1 interacts with a family of hepatocyte-specific promoters," <i>Proc. Natl. Acad. Sci. USA</i> , 85:7937-7941, 1988.					
	C24	Cox <i>et al.</i> , "Perspectives in diabetes; mapping diabetes-susceptibility genes; lessons learned from search for DNA marker for maturity-onset diabetes of the young," <i>Diabetes</i> , 41:401-407, 1992.					
	C25	De Simone <i>et al.</i> , "LFB3, a heterodimer-forming homeoprotein of the LFB1 family, is expressed in specialized epithelia," <i>EMBO J.</i> , 10:1435-1443 1991.					
	C26	Drewes <i>et al.</i> , "Human hepatocyte nuclear factor 4 isoforms are encoded by distinct and differentially expressed genes," <i>Mol. Cell. Biol.</i> , 16(3):925-931, 1996.					
	C27	Duncan <i>et al.</i> , "Expression of transcription factor HNF-4 in the extraembryonic endoderm, gut, and nephrogenic tissue of the developing mouse embryo: HNF-4 is a marker for primary endoderm in the implanting blastocyst," <i>Proc. Natl. Acad. Sci. USA</i> , 91:7598-7602, 1994.					

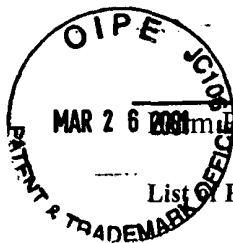
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TO-1449 (modified)		Atty. Docket N . ARCD:272USC1/TJS	Serial No. 09/754,106
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant Graeme I. Bell <i>et al.</i>	
		Filing Date: January 03, 2001	Group: 1655
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 1</i>	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A3	5,795,726	8/18/98	Gucksmann			
	A4	5,800,998	9/1/98	Gucksmann			

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
	B1	WO 98/21239	5/22/98	PCT			
	B2	WO 98/21363	5/22/98	PCT			

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C111	Hegele <i>et al.</i> , "Hepatocyte nuclear factor-1 α G3195," <i>Diabetes Care</i> , 22(3):524, 1999.
	C112	Yamagata <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α gene in maturity onset diabetes of the young (MODY3), <i>Nature</i> , 384:455-458, 1996.
	C113	Kaisaki <i>et al.</i> , "Mutations in the Hepatocyte Nuclear Factor-1 α Gene in MODY and early-onset NIDDM," <i>Diabetes</i> , 46:528-535, 1997.
	C114	Yamada <i>et al.</i> , "Mutations in the Hepatocyte Nuclear Factor-1 α Gene (MODY3) are not a major cause of Late-Onset NIDDM in Japanese Subjects," <i>Diabetes</i> , 46:1512-1513, 1997.
	C115	Bulman <i>et al.</i> , "A missense mutation in the hepatocyte nuclear factor 4 α gene in a UK pedigree with maturity-onset diabetes of the young," <i>Diabetologia</i> , 40:859-862, 1997.
	C116	Urhammer <i>et al.</i> , "Genetic variation in the hepatocyte nuclear factor-1 α gene in Danish Caucasians with late-onset NIDDM," <i>Diabetologia</i> , 40:473-475, 1997.
	C117	Yamagata <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-4 α gene in maturity onset diabetes of the young (MODY1)," <i>Nature</i> , 384:458-460, 1996.

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List of Patents and Publications for Applicant's

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Atty. Docket No.

ARCD:272/WIM

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Applicants

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Filing Date:

September 9, 1997

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U.S. Patent Documents

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Foreign Patent Documents

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	C28.	Emens <i>et al.</i> , "Hepatocyte nuclear factor 1 α 1 is expressed in a hamster insulinoma line and transactivates the rate insulin I gene," <i>Proc. Natl. Acad. Sci. USA</i> , 89:7300-7304, 1992.					
	C29	Erdmann and Heim, "Orphan nuclear receptor HNF-4 binds to the human coagulation factor VII promoter," <i>J. Biol. Chem.</i> , 270:22988-22996, 1995.					
	C30	Fajans <i>et al.</i> , "Maturity-onset diabetes of the young," <i>Life Sci.</i> , 55(6):413-422, 1994.					
	C31	Figueiredo and Brownlee, "cis-Acting elements and transcription factors involved in the promoter activity of the human factor VIII gene," <i>J. Biol. Chem.</i> , 270:11828-11838, 1995.					
	C32	Forman and Samuels, "Dimerization among nuclear hormone receptors," 2(7):587-594, 1990.					
	C33	Forman and Samuels, "Interactions among a subfamily of nuclear hormone receptors: the regulatory zipper model," <i>Mol. Endocrinol.</i> , 4(9):1293-1301, 1990.					
	C34	Frain <i>et al.</i> , "The liver-specific transcription factor LF-B1 contains a highly diverged homeobox DNA binding domain," <i>Cell</i> , 59:145-157, 1989.					
	C35	Frayling <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α gene are a common cause of maturity-onset diabetes of the young in the U.K.," <i>Diabetes</i> , 46:720-725, 1997.					
	C36	Freedman and Luisi, "On the mechanism of DNA Binding by nuclear hormone receptors: a structural and functional perspective," <i>J. Cell Biochem.</i> , 51:140-150, 1993					
	C37	Furuta <i>et al.</i> , "Organization and partial sequence of the Hepatocyte Nuclear Factor-4 α /MODY1 gene and identification of a missense mutation, R127W, in a Japanese family with MODY," <i>Diabetes</i> , 46(10):1652-1657, 1997.					
	C38	Galson <i>et al.</i> , "The orphan receptor hepatic nuclear factor 4 functions as a transcriptional activator for tissue-specific and hypoxia-specific erythropoietin gene expression and is antagonized by EAR3/COUP-TF1," <i>Mol. Cell Biol.</i> , 15(4):2135-2144, 1995.					
	C39	Garcia <i>et al.</i> , "Functional interaction of nuclear factors EF-C, HNF-4, and RXR α with Hepatitis B Virus Enhancer I," <i>J. Virol.</i> , 67(7):3940-3950, 1993.					
	C40	German <i>et al.</i> , "Regulation of insulin gene expression by glucose and calcium in transfected primary islet cultures," <i>J. Biol. Chem.</i> , 265:22063-22066, 1990.					

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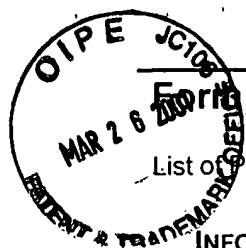
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	C41	Glucksmann <i>et al.</i> , "Novel mutations and a mutational hotspot in the MODY3 gene," <i>Diabetes</i> , 46:1081-1086, 1997.					
	C42	Gronemeyer and Moras, "How to Finger DNA," <i>Nature</i> , 375:190-191, 1995.					
	C43	Hanis <i>et al.</i> , "A genome-wide search for human non-insulin-dependent (type 2) diabetes genes reveals a major susceptibility locus on chromosome 2," <i>Nature Genet.</i> , 13:161-166, 1996.					
	C44	Hansen <i>et al.</i> , "Novel MODY3 mutations in the hepatocyte nuclear factor-1 α gene," <i>Diabetes</i> , 46:726-730, 1997.					
	C45	Hansen and Crabtree, "Regulation of the HNF-1 homeodomain proteins by DCoH," <i>Current Opinion in Genetics and Development</i> , 3:246-253, 1993					
	C46	Hata <i>et al.</i> , "Identification of two splice isoforms of mRNA for mouse hepatocyte nuclear factor 4 (HNF-4)," <i>Biochim. Biophys. Acta</i> , 1260:55-61, 1995.					
	C47	Herman <i>et al.</i> , "Abnormal insulin secretion, not insulin resistance, is the genetic or primary defect of MODY in the RW pedigree," <i>Diabetes</i> 43:40-46, 1994.					
	C48	Hung and High, "Liver-enriched transcription factor HNF-4 and ubiquitous factor NF-Y are critical for expression of blood coagulation factor X," <i>J. Biol. Chem.</i> , 271:2323-2331, 1996.					
	C49	International Search Report dated February 26, 1998. (PCT/US97/16037) (ARCD:272P)					
	C50	Irwin <i>et al.</i> , "Sequential imputation for multilocus linkage analysis," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 91:11684-11688, 1994.					
	C51	Iwasaki <i>et al.</i> , "Characterization of Japanese families with early-onset type 2 (non-insulin dependent) diabetes mellitus and screening for mutations in the glucokinase and mitochondrial tRNA ^{Leu(UUR)} genes," <i>Acta. Diabetol.</i> , 32:17-22, 1995.					
	C52	Iwasaki <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α /MODY3 gene in Japanese subjects with early- and late-onset NIDDM," <i>Diabetes</i> , 46:1504-1508, 1997.					
	C53	Iwasaki <i>et al.</i> , "One Japanese MODY family with severe and progressive microangiopathies," <i>Diab. Res. and Clin. Pract.</i> , 4:237-240, 1988.					

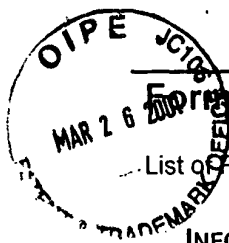
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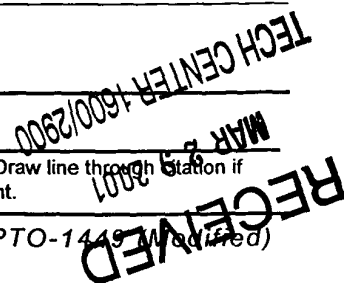
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	C54	Jiang <i>et al.</i> , "Exclusive homodimerization of the orphan receptor hepatocyte nuclear factor 4 defines a new subclass of nuclear receptors," <i>Mol. Cell Biol.</i> , 15(9):5131-5143, 1995.					
	C55	Jiang and Sladek, "The DNA binding domain of hepatocyte nuclear factor 4 mediates cooperative, specific binding to DNA and heterodimerization with the retinoid X receptor α ," <i>J. Biol. Chem.</i> , 272:1218-1225, 1997.					
	C56	Kaisaki <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α gene in MODY and early-onset NIDDM," <i>Diabetes</i> , 46:528-535, 1997; with published Errata, <i>Diabetes</i> , 46:1239, 1997.					
	C57	Kritis <i>et al.</i> , "Isolation and characterization of a third isoform of human hepatocyte nuclear factor 4," <i>Gene</i> , 173:275-280, 1996.					
	C58	Ktistaki <i>et al.</i> , "Recruitment of hepatocyte nuclear factor 4 into specific intranuclear compartments depends on tyrosine phosphorylation that affects its DNA-binding and transactivation potential," <i>Proc. Natl. Acad. Sci. USA</i> , 92:9876-9880, 1995.					
	C59	Kuo <i>et al.</i> , "A transcriptional hierarchy involved in mammalian cell-type specification," <i>Nature</i> 355:457-461, 1992.					
	C60	Kuo <i>et al.</i> , "Molecular cloning, functional expression, and chromosomal localization of mouse hepatocyte nuclear factor 1," <i>Nature</i> , 355:457-461, 1990.					
	C61	Ladias, "Convergence of multiple nuclear receptor signaling pathways onto the long terminal repeat of human immunodeficiency virus-1," <i>J. Biol. Chem.</i> , 269(8):5944-5951, 1994.					
	C62	Lai <i>et al.</i> , "Hepatocyte nuclear factor 3/fork head or "winged helix" proteins: a family of transcription factors of diverse biologic function," <i>Proc. Natl. Acad. Sci. USA</i> , 90:10421-10423, 1993.					
	C63	Lazzaro <i>et al.</i> , "LFB1 and LFB3 homeoproteins are sequentially expressed during kidney development," <i>Development</i> , 114:469-479, 1992.					
	C64	Lee <i>et al.</i> , "Structure of the retinoid X receptor α DNA binding domain: a helix required for homodimeric DNA binding," <i>Science</i> , 260:1117-1121, 1993.					

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List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

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Atty. Docket No.

ARCD:272/WIM

Serial No.

08/927,219

Applicants

Graeme I. Bell, Kazuya Yamagata, Naohisha Oda,
Pamela J. Kaisaki, Hiroto Furuta, Yukio Horikawa and
Stephan Menzel

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	C65	Lehto <i>et al.</i> , "Characterization of the MODY3 phenotype," <i>J. Clin. Invest.</i> , 99(4):582-591, 1997.					
	C66	Lemaigre <i>et al.</i> "Hepatocyte nuclear factor 6, a transcriptase factor that contains a novel type of homeodomain and a single cut domain," <i>Proc. Natl. Acad. Sci. USA</i> , 93:9460-9464, 1996.					
	C67	Lesage <i>et al.</i> , "Linkage analyses of the MODY3 locus on chromosome 12q with late-onset NIDDM," <i>Diabetes</i> , 44:1243-1247, 1995.					
	C68	Mangelsdorf <i>et al.</i> , "The nuclear receptor superfamily: the second decade," <i>Cell</i> , 83:835-839, 1995.					
	C69	Mendel <i>et al.</i> , "Characterization of a cofactor that regulates dimerization of a mammalian homeodomain protein," <i>Science</i> 254:1762-1767, 1991.					
	C70	Mendel and Crabtree, "HNF-1, a member of a novel class of dimerizing homeodomain proteins," <i>JBC</i> , 266:677-680, 1991.					
	C71	Mendel <i>et al.</i> , "HNF-1 α and HNF-1 β (vHNF-1) share dimerization and homeo domains, but not activation domains, and form heterodimers <i>in vitro</i> ," <i>Genes and Dev.</i> , 5:1042-1056, 1991a.					
	C72	Menzel <i>et al.</i> , "Localization of MODY3 to a 5-cM region of human chromosome 12," <i>Diabetes</i> , 44:1408-1413, 1995.					
	C73	Metzger <i>et al.</i> , "Orphan receptor HNF-4 and bZip protein C/EBP α bind to overlapping regions of the apolipoprotein B gene promoter and synergistically activate transcription," <i>J. Biol. Chem.</i> , 268(22):16831-16838.					
	C74	Milatovich <i>et al.</i> , "Genes for the dimerization cofactor of hepatocyte nuclear factor-1 α (DCOH) are on human and murine chromosomes 10," <i>Genomics</i> , 16:292-295, 1993.					
	C75	Miquerol <i>et al.</i> "Expression of the L-type pyruvate kinase gene and the hepatocyte nuclear factor 4 transcription factor in exocrine and endocrine pancreas," <i>J. Biol. Chem.</i> , 269:8944-8951, 1994.					

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	C77	Nagy <i>et al.</i> , "Expression of hepatic transcription factors during liver development and oval cell differentiation," <i>J. Cell Biol.</i> , 126(1):223-233, 1994.					
	C78	Naka and Brownlee, "Transcriptional regulation of the human factor IX promoter by the orphan receptor superfamily factors, HNF4, ARP1 and COUP/Ear3," <i>Brit. J. Haematol.</i> , 92:231-240, 1996.					
	C79	Nakshatri and Chambon, "The directly repeated RG(G/T) motifs of the rat and mouse cellular retinol-binding protein II genes are promiscuous binding sites for RAR, RXR, HNF-4, and ARP-1 homo- and heterodimers," <i>J. Biol. Chem.</i> , 269(2):890-902, 1994.					
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	C81	Polonsky <i>et al.</i> , "Non-insulin-dependent diabetes mellitus-a genetically programmed failure of the beta cell to compensate for insulin resistance," <i>Seminars in Medicine of the Beth Israel Hospital, Boston, N. Engl. J. Med.</i> 334:777-783, 1996.					
	C82	Pontoglio <i>et al.</i> , "Hepatocyte nuclear factor 1 inactivation results in hepatic dysfunction, phenylketonuria, and renal fanconi syndrome," <i>Cell</i> , 84:575-585, 1996.					
	C83	Rastinejad <i>et al.</i> , "Structural determinants of nuclear receptor assembly on DNA direct repeats," <i>Nature</i> , 375:203-211, 1995.					
	C84	Reijnen <i>et al.</i> , "Disruption of a binding site for hepatocyte nuclear factor 4 results in hemophilia B leyden," <i>Proc. Natl. Acad. Sci. USA</i> , 89:6300-6303, 1992.					
	C85	Renaud <i>et al.</i> "Crystal structure of the RAR- γ ligand-binding domain bound to all- <i>trans</i> retinoic acid," <i>Nature</i> , 378:681-689, 1995.					
	C86	Rey-Campos <i>et al.</i> , "vHNF-1 is a homeoprotein that activates transcription and forms heterodimers with HNF-1," <i>EMBO J.</i> , 10:1445-1457, 1991.					

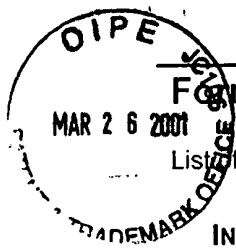
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	C87	Ringeisen <i>et al.</i> , "The transactivation potential of variant Hepatocyte Nuclear Factor 1 is modified by alternative splicing," <i>J. Biol. Chem.</i> , 268:25706-25711, 1993.					
	C88	Rothschild <i>et al.</i> , "A genetic map of chromosome 20q12-q13.1: multiple highly polymorphic microsatellite and RFLP markers linked to the maturity-onset diabetes of the young (MODY) locus," <i>Am. J. Hum. Genet.</i> , 52:110-23, 1993.					
	C89	Schuler <i>et al.</i> , "A gene map of the human genome," <i>Science</i> , 274:540-546, 1996.					
	C90	Sladek <i>et al.</i> , "Liver-enriched transcription factor HNF-4 is a novel member of the steroid hormone receptor superfamily," <i>Genes and Dev.</i> , 4:2353-2365, 1990.					
	C91	Sladek, "Orphan receptor HNF-4 and liver-specific gene expression," <i>Receptor</i> , 3(3):223-232, 1993.					
	C92	Sladek, "Orphan receptor HNF-4 and liver-specific gene expression," <i>Receptor</i> , 4(1):64, 1994.					
	C93	Stoffel, M. <i>et al.</i> , "A yeast artificial chromosome-based map of the region of chromosome 20 containing the diabetes-susceptibility gene, MODY1, and a myeloid leukemia related gene," <i>Proc. Natl. Acad. Sci. USA</i> , 93:3937-3941, 1996.					
	C94	Tavaviras <i>et al.</i> , "Characterization of the mouse HNF-4 gene and its expression during mouse embryogenesis," <i>Mech. Dev.</i> , 48:67-79, 1994.					
	C95	Thöny <i>et al.</i> , "Characterization of the human <i>PCBD</i> gene encoding the bifunctional protein pterin-4 α -carbinolamine dehydratase/dimerization cofactor for the transcription factor HNF-1 α ," <i>Biochem. Biophys. Res. Comm.</i> , 210(3):966-973, 1995.					
	C96	Tian and Schibler, "Tissue-specific expression of the gene encoding hepatocyte nuclear factor 1 may involve hepatocyte nuclear factor 4," <i>Genes Dev</i> 5:2225-2234, 1991.					
	C97	Tokuyama <i>et al.</i> , "Evolution of β -cell dysfunction in the male Zucker diabetic fatty rat," <i>Diabetes</i> , 44:1447-1457, 1995.					
	C98	Tronche and Yaniv, "HNF1, a homeoprotein member of the hepatic transcription regulatory network," <i>BioEssays</i> , 14(9):579-587, 1992.					

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	C99	Urhammer <i>et al.</i> , "A prevalent amino acid polymorphism at codon 98 in the hepatocyte nuclear factor-1 α gene is associated with reduced serum c-peptide and insulin responses to an oral glucose challenge," <i>Diabetes</i> , 46:912-916, 1997.					
	C100	Vaxillaire <i>et al.</i> , "A gene for maturity onset diabetes of the young (MODY) maps to chromosome 12q," <i>Nature Genetics</i> , 9:418-423, 1995.					
	C101	Vaxillaire <i>et al.</i> , "Identification of nine novel mutations in the hepatocyte nuclear factor 1 alpha gene associated with maturity-onset diabetes of the young (MODY3)," <i>Human Mol. Gen.</i> , 6(4):583-586, 1997.					
	C102	Wade <i>et al.</i> , "Apolipoprotein(a) gene transcription is regulated by liver-enriched <i>trans</i> -acting factor hepatocyte nuclear factor 1 α ," <i>J. Biol. Chem.</i> , 269:19757-19765, 1994.					
	C103	Wagner <i>et al.</i> "A structural role for hormone in the thyroid hormone receptor," <i>Nature</i> , 378:690-697, 1995.					
	C104	Weinstein <i>et al.</i> , The winged-helix transcription factor <i>HNF-3β</i> is required for notochord development in the mouse embryo," <i>Cell</i> , 78-575-588, 1994.					
	C105	Xanthopoulos <i>et al.</i> , "The different tissue transcription patterns of genes for HNF-1, C/EBP, HNF-3, and HNF-4, protein factors that govern liver-specific transcription," <i>Proc. Natl. Acad. Sci. USA</i> , 88:3807-3811, 1991.					
	C106	Yamagata <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α gene in maturity-onset diabetes of the young (MODY3)," <i>Nature</i> , 384:455-458, 1996b.					
	C107	Yamagata <i>et al.</i> , "Mutations in the hepatocyte nuclear factor-1 α gene in maturity-onset diabetes of the young (MODY1)," <i>Nature</i> , 384:458-460, 1996a.					
	C108	Zhang <i>et al.</i> , "Mutations that alter ligand-induced switches and dimerization activities in the retinoid X receptor," <i>Mol. Cell. Biol.</i> , 14:4311-4323, 1994.					
	C109	Zhong <i>et al.</i> , "The expression pattern of a <i>Drosophila</i> homolog to the mouse transcription factor HNF-4 suggests a determinative role in gut formation," <i>EMBO J.</i> , 12(2):387-544, 1993.					

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	C110	Zhong <i>et al.</i> , "Tissue-specific regulation of mouse hepatocyte nuclear factor 4 expression," <i>Mol. Cell. Biol.</i> , 14:7276-7284, 1994.					

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